

## CHAPTER IV

### RESEARCH FINDINGS AND DISCUSSION

This chapter presents the research findings, hypothesis testing and discussions which refer to the attempts to know about the effectiveness of vocabulary self-collection strategy on students' vocabulary mastery.

#### A. Research Findings

The research findings discusses an analysis of the ability of the first graders of MA Ma'arif Udanawu in vocabulary mastery when they taught by using vocabulary self-collection strategy and when they taught without using vocabulary self-collection strategy. The subjects of the research consist of two classes that were treatment class and control class. The data were described into two tables. The table 4.1 showed students' score and achievement in experiment class and the table 4.2 showed students' score and achievement in control class. The data of this research were pre-test score and post-test score of experiment group and control group. The scores are presented as follows.

1. Data of experiment class

**Table 4.1**

Students' vocabulary mastery scores before and after being taught using vocabulary self-collection strategy.

No.	Name	Pre-Test	Post-Test	Gain
1.	AF	55	80	25
2.	AA	60	70	10
3.	AM	85	90	5
4.	ASN	65	80	15
5.	CFA	70	85	15

6.	CCMR	60	60	0
7.	CR	60	70	10
8.	DFUA	60	65	5
9.	DM	75	85	10
10.	DE	75	85	10
11.	E	75	85	10
12.	EA	70	65	-5
13.	FNL	85	65	-20
14.				
15.	KN	60	70	10
16.	KNi	70	80	10
17.	L	75	75	0
18.	LMS	60	70	10
19.	MRKN	55	80	25
20.	MJ	75	70	-5
21.	MJ	80	65	-15
22.	M	60	65	5
23.	NDN	60	65	5
24.	NFW	70	70	0
25.	NRV	75	65	-10
26.	NFS	80	65	-15
27.	PANI	70	65	-5
28.	PIS	50	80	30
29.	PLR	60	65	5
30.	PNH	60	80	20
31.	RKW	75	80	5
32.	SR	75	65	-10
33.	SHS	65	80	15
34.	SAF	75	80	5
35.	S	75	70	-5
36.	TDU	70	80	10
37.	TM	80	80	0
38.	UNA	60	65	5
39.	VPES	60	80	20
40.	ZU	80	80	0
N=39	Total Score	2670	2875	205

a. Pre-test experimental group

**Table 4.2**

The output of statistic data of experimental class' score in pre-test

<b>Statistics</b>		
Pre test		
N	Valid	39
	Missing	1
Mean		68.46
Median		70.00
Mode		60
Sum		2670

b. Post-test experimental group

**Table 4.3**

The output of statistic data of experimental class' in post-test

<b>Statistics</b>		
Post test		
N	Valid	39
	Missing	1
Mean		73.72
Median		70.00
Mode		80
Sum		2875

Based on the table above, (4.2 and 4.3) show that the highest score of pre-test was 85, it was gotten by two students and the lowest score was 50, it was gotten by one student. The mean of pre-test score was 68.46. Then, the highest score of post-test was 90, it was gotten by one student and the lowest score of post-test was 60, it was gotten by one student. The mean of post-test score was 73.72. The students' result can show that the post-test is higher score after applied

vocabulary self-collection strategy (VSS). From the calculating of the determine mean the experimental class, the average between pre-test and post-test increase amount 5.26.

## 2. Data of control class

**Table 4.4**

Students' vocabulary mastery scores before and after taught without using vocabulary self-collection strategy

No.	Name	Pre-Test	Post-Test	Gain
1.	AWNf	75	75	0
2.	ADPS	70	80	10
3.	AA	65	60	-5
4.	AAS	90	85	-5
5.	BM	70	85	15
6.	BBI	90	85	-5
7.	BLAJ	70	85	15
8.	CN	70	55	-15
9.	DNA	65	60	-5
10.	EBN	75	80	5
11.	EDY	90	55	-35
12.	FIU	70	80	10
13.	FMP	75	65	-10
14.	H	65	45	-20
15.	IK	65	60	-5
16.	INF	70	60	-10
17.	II	70	60	-10
18.	LF	65	55	-10
19.	MF	75	50	-25
20.	NAP	60	85	25
21.	NMMH	90	50	-40
22.	NECW	75	70	-5
23.	NRN	70	85	15
24.	NA	80	80	0
25.	N	65	65	0
26.	NI	75	80	5
27.	PDNA	65	60	-5
28.	PCPS	65	75	10
29.	PFO	90	85	-5
30.	RIW	65	60	-5
31.	SDI	75	65	-10
32.	SPP	60	50	-10
33.	SDA	75	75	0

34.	SDL	65	80	15
35.	SA	80	85	5
36.	SANA	90	85	-5
37.	SNA	60	55	-5
38.	SS	50	35	-15
39.				
40.	UM	75	60	-15
N=40	Total Score	2885	2740	-145

a. Pre-test control group

**Table 4.5**

The output of statistic data of control class' score in pre-test

Statistics		
Pre test		
N	Valid	39
	Missing	1
Mean		72.18
Median		70.00
Mode		65
Sum		2815

b. Post-test control group

**Table 4.6**

The output of statistic data of control class' in post-test

Statistics		
Post test		
N	Valid	39
	Missing	1
Mean		68.33
Median		65.00
Mode		85
Sum		2665

Based on the table above, (4.5 and 4.6) show that the highest score of pre-test was 90, it was gotten by six students and the lowest score was 50, it was gotten by one student. The mean of pre-test score was 72.18. Then, the highest score of post-test was 85, it was gotten by nine students and the lowest score of post-test was 35, it was gotten by one student. The mean of post-test score was 68.33.

**B. Hypothesis Testing**

In the hypothesis, the writer stated that there was a significant difference in the students’ achievement of vocabulary mastery between the experimental and the control groups. In order to analyze the significant difference between the experimental and the control groups, *t-test* statistical analysis was applied. Before compute the *t-test*, the writer did the gained score analysis to know the homogeneity testing using F test (levene’s test), to know whether to use equal variance assumed (if variance is the same) or use equal variance not assumed (if the variance is different). The hypothesis in F test can be seen bellow:

1. Ho: both variance are the same (experimental and control group)
2. Ha: both variance are different (experimental and control group)

By applying the *t-test* analysis, the writer could accept or reject the null hypothesis. The result of the *t-test* statistical analysis are provided in table 4.7 below:

**Table 4.7 result of *t-test***

Group Statistics					
		N	Mean	Std. Deviation	Std. Error Mean
Gain	treatmen class	39	5.26	11.236	1.799
	control class	39	-3.85	13.301	2.130

**Table 4.8 result of t-test**

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Gain	Equal variances assumed	.372	.544	3.265	76	.002	9.103	2.788	3.550	14.656
	Equal variances not assumed			3.265	73.934	.002	9.103	2.788	3.547	14.658

Based on the table 4.7 (Group Statistics) above, it shows that F is 0.372 it means that F (0.372) is bigger than 0.050 and Ho is accepted. It can be concluded that both variance experimental and control group are the same. The result is the writer used Equal Variance Assumed in making decision of T-test.

Based on the result of the hypothesis test result with t-test above, there is a significant difference from the score of gain of the students' of the experimental group (M= 5.26, SD= 11.236) and control group (M= -3.85, SD= 13.301) then Ho is rejected and Ha accepted. The mean of experimental class is 5.26 while the control class is -3.85. It means that the mean of students' score in experimental class is higher than the mean of students' score in control

class. The gain of mean experiment class and control class is 1.41 and the differences ranged from 3.54 to 14.65.

The analysis of the homogeneity revealed that the two groups had the same variances or homogeneous, so the information from Equal variances assumed was used to interpret the t-test result. Based on the table 4.8 the significant value of the t (2 tailed) was 0.002. Because it was lower than the significant 0.050, it was concluded that there was significant difference in the students' achievement between the experimental and the control groups in mastering vocabulary. It means that the alternative hypothesis ( $H_a$ ) is accepted and the null hypothesis ( $H_o$ ) is rejected. In other words, it can be concluded that there is a significant difference on students' score in teaching vocabulary between who were taught by using vocabulary self-collection strategy and those who were not.

### **C. Discussion**

From the experimental and control groups the writer can be inferred that Vocabulary Self-collection Strategy (VSS) has effect on students' mastery this was in line with the statement by Haggard (1986), Vocabulary Self-Collection Strategy enhanced students' vocabulary growth. The implementation of Vocabulary Self-collection Strategy (VSS) in this study showed that students become interest in learning vocabulary. That opinion was in line with the theory states by Ruddell (2005) students are required to choose and select a word in a text or other resources based on their choice to learn.

In this study the writer suggest that a strategy can be applied in the teaching and learning process of vocabulary. This opinion was in line with the research findings of Indriana Juwita (2013) vocabulary self-collection strategy can be applied in teaching vocabulary because this



strategy is interesting and enjoyment for the students. The students' vocabulary will be enhanced and increased by using this strategy. Then, this strategy also helps the students to understand the words based on the context.

Besides of that, vocabulary self-collection strategy can improve students' motivation in learning vocabulary and this strategy also improve students' reading comprehension. This opinion was in line with the research findings of Zulfirman Zani and Jonri Kasnadi (2016) Vocabulary Self-Collection Strategy can improve student reading comprehension and their motivation.

Vocabulary Self-collection Strategy stimulates the students' active participation because in here the students can choose the word based on their interest or those which are important to know and then define the words based on the context of the text. Besides of that they can share and discuss the words that they get with their friends. It makes the students learn vocabulary independently, encourage them to solve the problem and improve their vocabulary knowledge with the assist of their friends and the guides from the writer.